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09/680,265	10/05/2000	Frank Brouwer	2380-229	8852

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NIXON & VANDERHYE P.C.
8th Floor
1100 North Glebe Road
Arlington, VA 22201-4714

EXAMINER

MEW, KEVIN D

ART UNIT	PAPER NUMBER
2664	6

DATE MAILED: 05/06/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/680,265

Applicant(s)

BROUWER, FRANK

Examiner

Kevin Mew

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 October 2000.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-48 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-11, 13-27, 29-43, 45-48 is/are rejected.
- 7) ☒ Claim(s) 12, 28, 44 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 5, 4
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

Detailed Action

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

1. Claims 5-7, 21-23, 37-39 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 5, 21, 37 recite the limitation "using Expression 5" in line 2 of the claim, respectively. There is insufficient antecedent basis for this limitation in the claim.

Claims 6, 22, 38 recite the limitation "using Expression 6" in line 2 of the claim, respectively. There is insufficient antecedent basis for this limitation in the claim.

Claim 7, 23, 39 recite the limitation "using Expression 7" in line 2 of the claim, respectively. There is insufficient antecedent basis for this limitation in the claim.

It is noted that the features upon which applicant relies (i.e., Expression 5, Expression 6 and Expression 7) are not recited in the above rejected claims. Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. **Claims 1-4, 8-11, 13-16, 17-20, 24-27, 29-32, 33-36, 40-43 & 45-48** are rejected under 35 U.S.C. 102(e) as being anticipated by Petersen (US Publication 2002/0049062).

Regarding claims 1, 17, 33, Petersen discloses a radio access network (**Universal Mobile Telephony System**, see lines 1-6, paragraph 0022, page 2 and element 10, Fig. 1) for comprising a base station node (**Node B**, see lines 12-14, paragraph 0024, page 2 and element 20a-20d, Fig. 1) to perform the method of operating a radio access network (**Universal Mobile Telephony System**, see lines 1-6, paragraph 0022, page 2 and element 10, Fig. 1) which determines a number of connections (**admission control functions, the decision process of admitting or not admitting a new connection, are controlled by Node B**, see lines 1-3, paragraph 0006, page 1 and lines 1-3, paragraph 0010, page 1) for each of plural spreading factors that can be added to the base station node (**utilizing consumption laws per spreading factor to calculate how much free capacity exists when each connection is established and released**, see lines 9-13, paragraph 0007, page 1), and which sends to a radio network controller (RNC) node (**CRNC**, see lines 6-8, paragraph 0007, page 1 and element 18, Fig. 1) a capacity indication (**internal capacity**, see lines 6-7, paragraph 0007, page 1) including a capacity

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value (**available internal capacity per Node B**, see lines 6-7, paragraph 0007, page 1) based on the determined number of connections (**Node B reports its available internal capacity per Node B to the CRNC**, see lines 6-8, paragraph 0007, page 1 and elements 10 and 20a-20d, Fig. 1; **note that the available capacity of Node B is based on the number of connections established**, see lines 11-17, paragraph 0007, page 1).

Regarding claims 2, 18, 34, Petersen discloses the apparatus of claims 1, 17, 33, respectively, wherein the capacity indication (**internal capacity**, see lines 6-7, paragraph 0007, page 1) includes a vacancy capacity value (**available internal capacity per Node B**, see lines 6-7, paragraph 0007, page 1) for each of plural spreading factors (**available internal capacity per Node B is based on consumption laws per spreading factor**, see lines 8-10, paragraph 0007, page 1).

Regarding claim 3, 19, 35, Petersen discloses the apparatus of claims 2, 18, 34, respectively, wherein the capacity indication (**internal capacity of Node B**) includes a number of connections that can be added at the base station for each of plural spreading factors (**Node B reports its available internal capacity per Node B to the CRNC**, see lines 6-8, paragraph 0007, page 1 and elements 10 and 20a-20d, Fig. 1; **note that the available capacity of Node B is based on the number of connections established**, see lines 11-17, paragraph 0007, page 1 **and on consumption laws per spreading factor**, see lines 8-10, paragraph 0007, page 1).

Regarding claims 4, 20, 36, Petersen discloses the apparatus of claims 1, 17, 33, respectively, wherein the capacity indication (**internal capacity of Node B**, see lines 6-7, paragraph 0007, page 1) is a total capacity value calculated using a vacancy capacity value (**available internal capacity per Node B**, see lines 6-7, paragraph 0007, page 1)

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for each of plural spreading factors (**available internal capacity per Node B is based on consumption laws per spreading factor**, see lines 8-10, paragraph 0007, page 1).

Regarding claims 8, 24, 40, Petersen discloses the apparatus of claims 1, 17, 33, respectively, wherein the base station tracks usage of base station resources for determining the number of connections that can be added to the base station node (**Node B tracks the available capacity, and hence determines the number of connections that can be accepted**, see lines 6-17, paragraph 0007, page 1).

Regarding claims 9, 25, 41, Petersen discloses the apparatus of claims 1, 17, 33, respectively, wherein the capacity indication reports the determined number for a particular spreading factor utilized at the base station node (**Node B reports the available capacity, and hence the number of connections that can be accepted, is based on utilizing the consumption laws per spreading factor**, see lines 6-17, paragraph 0007, page 1).

Regarding claims 10, 26, 42, Petersen discloses the apparatus of claims 1, 17, 33, respectively, wherein the capacity indication reports the determined number separately for uplink transmissions and downlink transmissions relative to the base station node (**Node B reports the available capacity, and hence the number of connections that can be accepted, for uplink and downlink signaling**, see lines 6-9, paragraph 0007, page 1).

Regarding claims 11, 27, 43, Petersen discloses the apparatus of claims 1, 17, 33, respectively, wherein the capacity indication (**internal capacity of Node B**, see lines 6-7, paragraph 0007, page 1) reports the determined number based on a combination of free connections for each of plural spreading factors, and using consumption laws appropriate

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for each of the spreading factors (**Node B reports its available internal capacity and hence its number of connections that can be accepted, based on its consumption laws per spreading factor**, see lines 6-17, paragraph 0007, page 1).

Regarding claims 13, 29, 45, Petersen discloses the apparatus of claims 1, 17, 33, respectively, wherein the capacity indication (**internal capacity of Node B**, see lines 6-7, paragraph 0007, page 1) is included in a 3GPP "Resource Status Indication" message (**the UMTS network in Fig. 1 is 3rd generation Partnership (3GPP) technical specifications, see lines 5-9, paragraph 0022, page 2 and Node B reported the resource capabilities by sending a Resource Status Indication message to the CRNC**, see lines 1-4, paragraph 0042, page 2 and lines 4-7, paragraph 0043, page 2).

Regarding claims 14-15, 30-31, 46-47, Petersen discloses the apparatus of claims 1, 17, 33, respectively, wherein the capacity indication (**Node B internal resource capability**, see lines 1-3, paragraph 0030, page 2) is included in a message which is distinct from a 3GPP "Resource Status Indication" message (**Node B can report a AUDIT RESPONSE message that includes Node B internal resource capability and consumption laws to CRNC**, see lines 4-8, paragraph 0028, and lines 1-7, paragraph 0030, page 2).

Regarding claims 16, 32, 48, Petersen discloses the apparatus of claims 1, 17, 33, respectively, wherein the base station node has plural devices (**base station Node B provides services to user equipment and RNC**, see element 22 and element 18, Fig. 1), and wherein the capacity determination is based on a number of free resources per device (**Node B reports its available internal capacity and hence its number of connections**

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established and released. Once the number of free connections is known, the number of free resources is determined, see lines 6-17, paragraph 0007, page 1).

Allowable Subject Matter

3. **Claims 12, 28 & 44** are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter:

Claims 12, 28 & 44, in lines 1-2 respectively, the apparatus of claims 11, 27 & 43, respectively, wherein the combination is a weighted combination.

Conclusion

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure with respect to resource capacity reporting to a control node of a radio access network.

US Patent 6,424,618 to Uesugi et al.

US Patent 6,711,403 to Herrmann et al.

US Patent 6,647,005 to Cao et al.

US Patent 6,567,670 to Petersson

US Patent 6,353,638 to Hottinen et al.

US Patent 6,404,778 to Hayashi et al.

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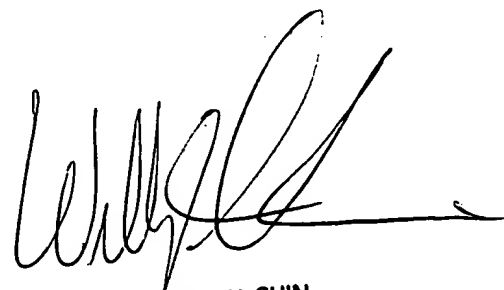
5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kevin Mew whose telephone number is 703-305-5300.

The examiner can normally be reached on 9:00 am - 5:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ricky Ngo can be reached on 703-305-4798. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

KDM
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WELLINGTON CHIN
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600